

CLAIMS

- 1) Process of grape seed extraction from *Vitis vinifera* grapes previously treated in any variety of manners, characterised in that skin and seeds are separated immediately after the work up to which the grapes have been subjected, so as to avoid and/or stop any fermentation due to the presence of skin of any other process liquids.
- 2) Process as claimed in claim 1) characterised in that said grapes come from processes not of fermentation type, ex. production of grape juice.
- 3) Process as claimed in any previous claim for seeds coming from organic cultivation.
- 4) Process as claimed in any previous claim, characterised in that the separation is performed with a single or multiple step shaking separator, otherwise seeds spreader machine.
- 5) Process as claimed in any previous claim, characterised in that seeds are dried after the separation.
- 6) Process as claimed in claim 5), characterised in that said drying step is performed in a hot air dryer.
- 7) Process as claimed in claim 5) or in claim 6), characterised in that said drying step occurs at a temperature between 30° and 120°C.
- 8) Process as claimed in any claims from 5) to 7), characterised in that a humidity grade between 2 to 30% is obtained at the end of the drying step.
- 9) Process as claimed in any previous claim, characterised in that an ethanol-water mixture is used as extractor solvent.
- 10) Process as claimed in claim 3), characterised in that the ethanol-water mixture has a weight ratio of 30:70.
- 11) Process as claimed in any previous claim, characterised in that a drug-liquor ratio is 1:10.
- 12) Process as claimed in any previous claim, characterised in that an extraction step is carried out in an atmosphere with a low percentage of oxygen.
- 13) Process as claimed in any previous claim, characterised in that an extraction step is carried out under pressure.

14) Process as claimed in any previous claim, characterised in that the concentration of the liquor is carried out (9) to eliminate the non aqueous phase.

5 15) Process as claimed in claim 14), characterised in that purification of the product obtained is carried out using chromatography (10).

16) Process as claimed in claim 15), characterised in that a chromatographic purification step takes place on polystyrenic resins such us XAD-16, XAD-4, DIAION HP-20.

10 17) Process as claimed in claim 16), characterised in that a concentration of the eluted part takes place.

15 18) Process as claimed in any previous claim, characterised in that the concentrated eluate or any product coming from the concentrator, when an unpurified product is desired, is dried on a spray-drier or anyother applicable process.

19) Grape seed extract with high polyphenol contents and low content of monomeric substances, obtained with the process according to any of the previous claims.

20 20) Extract as claimed in claim 16), characterised in that it is mixed to a green tea extract.

21) Use of seeds recovered from a process as in any claim from 1) to 18) to produce grape seed oil.

22) Use of an extract as claimed in claims 19) or in claim 20) as food additive or integrator.